

Grade 8 Academic Standards

Unit 5 Lesson

Science

Standard 1 The Nature of Science and Technology

Technology and Science

8.1.8 Explain that humans help shape the future by generating knowledge, developing new technologies, and communicating ideas to others.

Standard 2 Scientific Thinking

Communication

8.2.8 Use tables, charts, and graphs in making arguments and claims in, for example, oral and written presentations about lab or fieldwork.

Standard 3 The Physical Setting

The Earth and the Processes that Shape It

8.3.6 Understand and explain that the benefits of the Earth's resources, such as fresh water, air, soil, and trees, are finite and can be reduced by using them wastefully or by deliberately or accidentally destroying them.

8.3.7 Explain that the atmosphere and the oceans have a limited capacity to absorb wastes and recycle materials naturally.

Standard 4 The Living Environment

Interdependence of Life and Evolution

8.4.8 Describe how environmental conditions affect the survival of individual organisms and how entire species may prosper in spite of the poor survivability or bad fortune of individuals.

Standard 5 The Mathematical World

Shapes and Symbolic Relationships

8.5.4 Illustrate how graphs can show a variety of possible relationships between two variables.

Standard 7 Common Themes

Constancy and Change

8.7.7 Illustrate how things, such as seasons or body temperature, occur in cycles.

Social Studies

Standard 2 Civics and Government

Foundations of Government

8.2.4 Define and explain the importance of individual and civic responsibilities.

Standard 3 Geography

Environment and Society

8.3.9 Identify ways people modified the physical environment as the United States developed, and the types of problems that came as a result.

Unit 5 - Activities 1-7 satisfy the following Indiana academic standards:

Science

8.1.7 Explain why technology issues are rarely simple and one-sided because contending groups may have different values and priorities.

8.2.7 Participate in group discussions on scientific topics by restating or summarizing accurately what other have said, asking for clarification or elaboration, and expressing alternative positions.

8.2.8 Use tables, charts, and graphs in making arguments and claims in, for example, oral and written presentations about lab or fieldwork.

8.3.6 Understand and explain that the benefits of the Earth's resources, such as fresh water, air, soil, and trees, are finite and can be reduced by using them wastefully or by deliberately or accidentally destroying them.

8.3.7 Explain that the atmosphere and the oceans have a limited capacity to absorb wastes and recycle materials naturally.

8.4.8 Describe how environmental conditions affect the survival of individual organisms and how entire species may prosper in spite of the poor survivability or bad fortune of individuals.

8.7.7 Illustrate how things, such as seasons or body temperature, occur in cycles.

Social Studies

8.2.12 Explain how citizens can monitor and influence the development and implementation of public policies.

8.3.9 Identify ways people modified the physical environment as the United States developed, and the types of problems that came as a result.